

## Description

# METHOD FOR LIMITING THE MOVEMENT OF AN INFANT IN A PARTICULAR DIRECTION

### BACKGROUND OF INVENTION

[0001] Infants are curious about their surroundings. From the time they are able to crawl, a baby will move, driven by curiosity from place to place. Infants will open drawers or grab items within their reach. Some items can be dangerous to the child; for example, sharp items such as kitchen knives or forks. Other items like glass or keepsakes can be broken or damaged if mishandled by the child.

[0002] Existing in the prior art are a myriad of devices developed for an infant's protection around the home. Child-proof locks prevent a child from opening drawers and gaining access to the contents within. Infant play-pens limit movement; however, the problem with play-pens is that they typically provide a very short term remedy as the infant does not enjoy the confined space and voices his dis-

pleasure by crying. Also used are fences and gates to prevent an infant's movement from one room to another.

Usually, these devices detract from a home's overall aesthetic design. Further, they themselves typically become a nuisance to parents who are forced to open and close a gate when moving from room to room.

[0003] New parents are thus faced with the dilemma of either: a) limiting the child's movement to a very confined space like a play-pen and suffer through the child's crying; or, b) not using a play-pen and constantly having to watch the infant as it moves around the home.

#### **SUMMARY OF INVENTION**

[0004] My invention is a method for limiting the movement of infants and small toddlers. As used in this specification, infant and toddler have the same meaning. My method can also be used for small domesticated pets such as small dogs. Specifically, the method pertains to the creation of an appropriately sized low-profile barrier to prevent movement by the toddler in a direction across the barrier. Barriers can be created adjacent to cabinets, bookcases, stereo equipment, etc. or the barrier can be created across an entryway or the like.

[0005] The barrier can be made of various designs. Important as-

pects of my invention are that the barrier be of a sufficient length and width to prevent an infant or small pet from either: a) reaching an undesired place such as a drawer or cabinet; or, b) being able to cross over the barrier. Also, the barrier must comprise a plurality of upward extending sections that have a top surface design that is incapable of puncturing the skin of an infant or that is generally not harmful to the infant but that will discourage traversing. Finally, the barrier must be low-profile to prevent the infant from being able to grab or remove certain portions or the barrier in its entirety.

[0006] The term "barrier" as used in this specification can have two meanings to represent two types of barriers. The first barrier type can be constructed of a sheeting material upon the top surface of which are a plurality of upward extending sections and the sheeting can be appropriately sized and thereafter positioned on the flooring where desired. The second barrier type is where a plurality of upward extending sections are attached to the flooring and the placement configuration of the plurality of sections is collectively referred to as a barrier.

[0007] The barrier is designed to have a low profile so that adults and older children will have no difficulty stepping across

or reaching over. In one embodiment, the barrier is comprised of a plurality of studs. Each stud can be individually attached upon sheeting ( first barrier type) or the studs can be individually attached to the flooring (second barrier type). Alternatively, a plurality of studs or upward extending sections can be positioned upon a plurality of horizontal units and the units can be appropriately positioned to form the barrier (second barrier type).

[0008] For hard floor surfaces such as wood, tile, or vinyl, each stud, upward extending section, or horizontal unit can be adhesively attached either directly to the flooring or by the use of Velcro®.

[0009] An example for use with carpets, each horizontal unit can be adhesively attached but the length of the pile may substantially reduce the proper orientation and thus the effectiveness of each stud. Therefore, preferably, the studs or horizontal units can be attached to the top side of a sheeting material such as a plastic sheet or wood panel, or some other sheeting material which would provide acceptable positioning of a plurality of low-profile upward extending sections (second barrier type). The sheeting would then be sized to conform to the intended use. The sheeting can then be appropriately positioned for use

such as either in a doorway, or in front of a cabinet or shelf, etc. The sheeting material can be designed to have adhesive material over a portion of the bottom side so that it can be adhesively attached to the carpet pile, or some other means to affix the sheeting into position can be used. This can provide some resistance to an infant who attempts to slide or lift the sheeting material away from the desired position.

[0010] Each horizontal unit has at least one substantially upward extending section or stem. The top portion of the section is designed to have a dull point, or short flat surface, or some other form which is intended to provide temporary discomfort when touched and body weight applied thereon. Sharp points or surfaces are discouraged since such forms may puncture the skin and physically injure the infant.

[0011] The upward extending section design has a low profile so that it is difficult for an infant to grab and detach or to cause injury if fallen upon. Therefore, the substantially upward extending section is of a very short length. The low profile and barrier configuration permits adults to walk over the barrier with no difficulty.

[0012] In sum, the barrier should be designed so that contact

with the stud or an alternative design to the stud will result in temporary discomfort but not cause injury. Contact with the barrier should simply discourage the infant from further movement in a certain direction. For example, in the situation where an infant is crawling, the barrier design should be capable of causing discomfort to the hand or knee if the infant attempts to cross the barrier and put its weight on its hand or knee. In the situation where an infant is walking, the barrier design should be capable of causing discomfort to the feet.

[0013] The low profile barrier design can take many forms. Placement of the studs or the like does not have to abut next to studs or the like on either side. Positioning can be spaced but should not so spaced so that an infant's foot can step into the barrier without contacting a surface area which will provide discomfort or uncomfortableness to the infant.

[0014] As mentioned above, infants are curious. It is to be understood that the infant, not knowing the purpose of the barrier, will attempt to crawl or walk over the barrier. My method relies on the infant's inherent learning mechanism. Initially, the infant will not know the purpose of the barrier and will attempt to cross, thereby encountering a

surface area which will cause temporary discomfort upon contact. The infant may cry for a short time.

[0015] The infant may make several more attempts to cross the barrier. However, once the infant is conditioned to believe it can not cross the barrier, it will not attempt to cross any more. When this situation occurs, the infant understands that the purpose of the barrier is to prevent further movement in that direction. However, since the toddler is not confined to a small play-pen, he is less likely to cry since an entire room is available to move about.

[0016] The barrier is created upon the floor and the required depth of the barrier is only to be of a distance which is only slightly more than the step or two of an infant. Therefore, older children and adults would have no difficulty stepping over the barrier or reaching across a barrier.

[0017] My method provides many advantages. Creating a barrier across the entrance to a room allows the infant to move about the room rather than being limited to the confined space of a play-pen. No unsightly fences or gates are required. Older children and adults would have no difficulty walking across the barrier. Besides keeping the infant within the room, additional barriers can be positioned

within the room and used to prevent the infant from reaching into a drawer, stereo cabinet or cd/dvd cabinet. Also, barriers can be positioned at the base and/or top of a stairway, preventing the infant from potentially falling and causing serious injury.

[0018] It should be obvious that the barrier will not be effective when the toddler is walking with shoes. Also, it is to be understood that my method is for small toddlers preferably from the age they begin to crawl to approximately 16 months old or to when the toddler has developed the cognitive skill to jump over the barrier or be able to slide a flat surface over the barrier to act as a bridge for crossing.

[0019] It is to be understood that the design described above is one embodiment for my invention, but many other designs are capable of performing the same objective, namely to prevent the infant from crossing over the barrier. The upward extending sections, which encompass the stud design, can be intermittent or continuous across the barrier and any design is acceptable so long as an infant can not navigate across the barrier without contacting at least one top surface design. Therefore, other barrier designs having these qualities should be considered as



being part of my herein described method.

[0020] As further examples of my invention, instead of a single sheeting material, multiple strips containing at least one upward extending section can be used that can be spaced parallel from one another; the multiple strips thus forming the intended barrier. Another example is where instead of strips, decorative patterns, squares, circles, octagons, etc, containing upward extending sections can be installed upon the flooring to form the intended barrier.

[0021] Because of the low-profile design, the horizontal units and upward extending sections are less asthetically intrusive than are fences, gates, and playpens.

[0022] Commercially, consumers could purchase pre-made sheeting material which include the upward extending sections either in roll form or flat-sheet form and then appropriately size the sheeting at home simply by cutting the sheeting. Alternatively, the upward extending sections could be purchased in packages and can then be secured to particularly hard flooring in an appropriate pattern to create the barrier.

#### **BRIEF DESCRIPTION OF DRAWINGS**

[0023] Fig. 1 is a top schematic view of a portion of a home floor plan illustrating the use of barriers for preventing infant

movement.

[0024] Fig. 2 is a top view of a horizontal unit comprising a plurality of upward extending sections.

[0025] Fig. 3 is a side view of the horizontal unit described in Fig. 2.

## **DETAILED DESCRIPTION**

[0026] Fig. 1 illustrates the use of my barrier 10a or 10b to limit the movement of an infant in a room, a portion of which is defined by "A". In this illustration, barriers are depicted by 10a and 10b. Each barrier is comprised of a plurality of horizontal units 14. Each barrier can be a sheeting material upon which horizontal units are attached or the barrier simply marks the outer perimeter of the arranged horizontal units attached directly to a floor surface.

[0027] Barrier 10a is placed in front of a piece of furniture such as a cabinet or television or stereo and barrier 10b is placed in the space leading to another room. Barrier 10a is of a sufficient length and width to prevent the infant or toddler from reaching over and barrier. Barrier 10b is of a sufficient length and width to prevent the infant or toddler from walking over.

[0028] Barriers 10a and 10b comprise the placement of a plurality of horizontal units 14 upon each of which are a plural-

ity of upward extending units or studs 12 as illustrated in Fig. 2. Each stud 12, as shown in Fig. 3 has a low profile and comprises a top end having a rounded tip to prevent puncture or injury.

[0029] A plurality of studs 12 can be formed on a single horizontal unit 14 and a plurality of units 14 can be positioned to form a barrier such as that depicted by either 10a or 10b.

[0030] Once a barrier having a sufficient length and depth is positioned properly in front of a piece of furniture or entryway, the infant, not knowing the purpose of the barrier, will attempt to cross and thus place its weight on one or more of studs 12. The infant will experience temporary discomfort and may cry. However, the infant's learning mechanism will teach it not to cross the barrier. Once the infant is conditioned, it will not attempt to cross the barrier until it develops the necessary cognitive skills to jump the barrier or place something over the barrier to protect it from studs 12.